

ABSTRACT

An osmotic pump having a minimally compliant, volume efficient piston positioned within a capsule. The capsule has an interior surface, a beneficial agent, and an osmotic agent. The piston is movable with respect to an interior surface of the capsule, and defines a movable seal with the interior surface of the capsule. The movable seal separates the osmotic agent from the beneficial agent. The piston has a length to total diameter ratio of about 1.1:1 and a core diameter to total diameter ratio of about 0.9:1. The piston enables greater beneficial agent and/or osmotic agent payload without increasing the size of the capsule. The osmotic agent imbibes liquid from a surrounding environment through a semipermeable body to cause the piston to move and in turn cause delivery of the beneficial agent from the capsule.